

WHAT IS CLAIMED IS:

5

1. A method of backing up data stored in a first virtual recording medium into a backup medium under control of a virtual storage system, comprising the steps of:

10

creating a second virtual recording medium comprising a duplicate of only an actual data recording area, in which actual data are recorded, in a recording area of the first virtual recording medium; and

15

backing up backup data recorded in the second virtual recording medium into the backup medium.

20

2. The method as claimed in claim 1, further comprising the step of:

25 recording a block correspondence table in the second virtual recording medium,

wherein the block correspondence table indicates a correspondence between at least one address for storing the actual data of the first virtual recording medium and at least one address for storing the backup data of the second virtual recording medium.

35

3. The method as claimed in claim 1, wherein the step of backing up comprises backing up

all backup data recorded in the second virtual recording medium into the backup medium sequentially.

5

4. A backup apparatus for backing up data recorded in a first virtual recording medium into a backup medium under control of a virtual storage system, comprising:

10 a creation part creating a second virtual recording medium comprising a duplicate of only an actual data recording area, in which actual data are recorded, in a recording area of the first virtual recording medium; and

15 a backup part backing up backup data recorded in the second virtual recording medium into the backup medium.

20

5. The backup apparatus as claimed in claim 4, further comprising:

25 a block correspondence table recording part recording a block correspondence table in the second virtual recording medium,

wherein the block correspondence table indicates a correspondence between at least one address for storing the actual data of the first virtual recording medium and at least one address for storing the backup data of the second virtual recording medium.

35

6. The backup apparatus as claimed in claim 4, wherein the backup part backs up all backup data recorded in the second virtual recording medium into the backup medium sequentially.

5

7. A program for causing a computer to execute a procedure to back up data stored in a first virtual recording medium into a backup medium under control of a virtual storage system, the procedure comprising the steps of:

10 creating a second virtual recording medium comprising a duplicate of only an actual data recording area, in which actual data are recorded, in a recording area of the first virtual recording medium; and

15 backing up backup data recorded in the second virtual recording medium into the backup medium.

25

8. The program as claimed in claim 7, the procedure further comprising the step of:

 recording a block correspondence table in the second virtual recording medium,

20 wherein the block correspondence table indicates a correspondence between at least one address for storing the actual data of the first virtual recording medium and at least one address for storing the backup data of the second virtual recording medium.

35

9. A computer readable recording medium
for storing a program to cause a computer to execute
5 a procedure to back up data stored in a first
virtual recording medium into a backup medium under
control of a virtual storage system, the procedure
comprising the steps of:

creating a second virtual recording medium
10 comprising a duplicate of only an actual data
recording area, in which actual data are recorded,
in a recording area of the first virtual recording
medium; and

backing up backup data recorded in the
15 second virtual recording medium into the backup
medium.

20

10. The computer readable recording
medium as claimed in claim 9, the procedure further
comprising the step of:

recording a block correspondence table in
25 the second virtual recording medium,

wherein the block correspondence table
indicates a correspondence between at least one
address for storing the actual data of the first
virtual recording medium and at least one address
30 for storing the backup data of the second virtual
recording medium.